



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/437,246 11/10/99 SHINADA

S 056708

EXAMINER

MM91/0927

SUGHRUE MION ZINN MACPEAK SEA PLLC
2100 PENNSYLVANIA AVENUE N W
WASHINGTON DC 20037-3202

NGHIEM, M

ART UNIT

PAPER NUMBER

2861

DATE MAILED:

09/27/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/437,246

Applicant(s)

SHINADA ET AL.

Examiner

Michael P Nghiem

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) 43-45 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4, 8, 9, 13-36 and 46-50 is/are allowed.
- 6) ☒ Claim(s) 5-7, 10-12 and 37-42 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 20 August 2001 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 16. 6) ☐ Other: .

DETAILED ACTION

The Amendment filed on August 20, 2001 has been acknowledged.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 3718 of this title before the invention thereof by the applicant for patent.

Claims 5-7, 10/5, 11/10/5, 12/11/10/5, 37/5, 38/5, 39/38/5, 40/39/38/5, 41/40/39/38/5, and 42/38/5 are rejected under 35 U.S.C. 102(e) as being anticipated by Barinaga et al. (US 5,777,646).

Barinaga et al. discloses all the claimed features of the invention including:

- an ink cartridge (20) for a printing apparatus (Figs. 8, 11) providing ink to a print head through an ink supply needle (162) and removably attached to the print head (Fig. 10), comprising:
 - an ink chamber (24) for containing ink;

Art Unit: 2861

- an ink supply port (28) for supplying ink from said ink chamber to the print head of the printing apparatus (Fig. 10), said ink supply port comprising an external opening (opening of 28);

- a packing member (104) provided in said ink supply port (Figs. 9, 10), forming an ink channel for allowing a flow of ink (Fig. 10), said packing member sealing the ink supply needle of the printing apparatus by fitting therewith (Fig. 10), said packing member comprising a hole (slit of 104) and a protruding rim (rim of 104, Fig. 9) surrounding said hole; and

- a valve device (102) contained in said ink supply port elastically abutting against said protruding rim of said packing member (102 abuts rim of 104, Fig. 9), said valve device selectively opening and closing said ink channel in conjunction with the ink supply needle (Figs. 9, 10),

- said packing member comprises a first surface facing said ink chamber formed with a cylindrical recess (recess occupied by 102, Fig. 9) having a diameter acceptable to receive a part of said valve device at said first surface (Fig. 9),

- said hole of said packing member having a diameter smaller than said diameter of said cylindrical recess at said first surface (slit of 104 is smaller than recess),

- an elastic member (100) always urging said valve member toward said packing member (Fig. 9),

- said valve member comprises a support structure for supporting said elastic member (surface of 102 supporting 100, Fig. 2),

- said support structure is radially shaped (surface of 102),

Art Unit: 2861

- a packing retainer (106) for retaining said packing member at said external opening of said ink supply port (Fig. 9),
- said packing retainer comprises a film (thin flat layer of 106, Fig. 9) capable of being penetrated by the ink supply needle of the printing apparatus (Fig. 10),
- said film is formed with a hole (hole of 106) which enables the ink supply needle to easily pass through (Fig. 10),
- said packing retainer is a protruding portion (layer of 106 protrudes from 104, Fig. 9) protruding from said external opening toward the center thereof.

Even though Barinaga et al. does not disclose said hole being formed by cutting said film in a cross shape, it has been held that determination of patentability of a product is based on the product itself and does not depend on its method of production. In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985).

Allowable Subject Matter

2. Claims 1-4, 8, 9, 10/(1,2,4), 11/10/(1,2,4), 12/10/(1,2,4), 13-36, 37/(1,2,4), 38/1,2,4,8,9), 39/38/(1,2,4,8,9), 40/39/38/(1,2,4,8,9), 41/40/39/38/(1,2,4,8,9), 42/38/(1,2,4,8,9), and 46-50 are allowed.

R sponds to Arguments

3. Applicant's arguments filed August 20, 2001 have been fully considered but they are not persuasive.

With respect to the 35 102 rejections, Applicant argues that the slit of 104 is not a hole. Examiner's position is that the slit of (104) of Barinaga is a hole in the sense that it is an opening. This opening is clearly shown in Fig. 10. Note the opening of the slit when the needle (162) protrudes through the septum (104).

Applicant further argues that the slit of Barinaga lacks the protruding rim.

Examiner's position is that Fig. 2 of Barinaga shows the packing member (104) having protruding rim surrounding the slit (rim surrounds slit of 104 and ball 102).

Applicant further argues that Barinaga does not teach the requirement recited in the preamble of claim 5 wherein the ink cartridge is removably attachable to a printhead.

Examiner's position is that Barinaga teaches an ink cartridge (20) attachable to needle (162). The needle could be construed to be a part of a printhead since the needle connects to a tube (169) which connects to the printhead.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. An inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at (703) 308-0956.


Michael Nghiem

September 18, 2001


N. Le
Supervisory Patent Examiner
Technology Center 2800